UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/858,080	05/15/2001	Kevin Collins	10006721-1	2538

22879   7590   04/27/2011

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
3404 E. Harmony Road
Mail Stop 35
FORT COLLINS, CO 80528

EXAMINER
BATURAY, ALICIA

ART UNIT	PAPER NUMBER
2441	

NOTIFICATION DATE	DELIVERY MODE
04/27/2011	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM
ipa.mail@hp.com
laura.m.clark@hp.com

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 09/858,080
Filing Date: May 15, 2001
Appellant(s): COLLINS ET AL.

Philip S. Lyren
(Registration #40,709)
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 01 February 2011 appealing from the Office action

mailed 02 September 2010.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application:

Claims 13-16 and 19 are rejected under 35 U.S.C. 101 as being drawn to non-statutory subject matter.

Claims 13-16, 19, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey et al. (U.S. 2002/0107971) in view of Mohaban et al. (U.S. 7,346,677) and further in view of Haumont et al. (U.S. 7,023,825).

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

WITHDRAWN REJECTIONS

The following grounds of rejection are not presented for review on appeal because they have been withdrawn by the examiner.

Claims 17 and 18 are rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter.

Claims 17 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey in view of Mohaban in view of Haumont and further in view of Courtright, II et al. (U.S. 6,157,963).

Claims 18 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bailey in view of Mohaban in view of Haumont and further in view of Bell et al. (U.S. 2002/0049778).

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

U.S. 7,023,825   HAUMONT ET AL.   04-2006

U.S. 7,346,677   MOHABAN ET AL.   03-2008

U.S. 2002/0107971   BAILEY ET AL.   08-2002

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

  Claims 13-16 and 19 are rejected under 35 U.S.C. 101 as being drawn to non-statutory

subject matter.

  Claims 13-16, 19, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Bailey et al. (U.S. 2002/0107971) in view of Mohaban et al. (U.S. 7,346,677) and further in

view of Haumont et al. (U.S. 7,023,825).

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
> any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

2. Claims 13-16 and 19 are rejected under 35 U.S.C. 101 as being drawn to non-statutory

subject matter. The program is embodied on a computer readable storage medium. Said

medium is interpreted to include non-statutory subject matter such as carrier waves, signals,

and communication media because carrier waves, signals, and communication media store

data within the wave, signal or media. The examiner encourages applicant to amend the

claims and specification with explicit arguments that the medium is 'non-transitory' or 'non-

transmissible.'

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

4.   Claims 13-16, 19, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Bailey et al. (U.S. 2002/0107971) in view of Mohaban et al. (U.S. 7,346,677) and

further in view of Haumont et al. (U.S. 7,023,825).

Bailey teaches the invention substantially as claimed including a network endpoint

system receives requests delivered in packet format via a network. The system uses a

transport accelerator at its front end, which performs all or some of the network protocol

processing. The transport accelerator is directly connected to one or more processing units,

which respond to the requests. The protocol processing may be partitioned between the

transport accelerator and the processing units in a manner that best uses their different

processing capabilities (see Abstract).

5.   With respect to claim 13, Bailey teaches a network storage device, comprising: computer

readable storage medium; and computer readable program code residing in said storage

medium (Bailey, page 7, paragraph 70), including program code that is executed to: receiving

an incoming transaction; define a usage policy that assigns a priority to the incoming

transaction based on the data in the meta data field and that assigns priorities to outgoing

transactions (Bailey, page 9, paragraph 82).

Bailey does not explicitly teach a transaction having a data field that includes a meta data

field with data and a priority field with a requested priority.

However, Mohaban teaches a transaction having a data field that includes a meta data

field with data (Mohaban, Fig. 1A, elements 102, 104, 106; col. 2, lines 51-65) and a priority

field with a requested priority (Mohaban, Fig. 1A, element 108; col. 2, lines 51-65).

It would have been obvious to one of ordinary skill in the art at the time the invention

was made to modify Bailey in view of Mohaban in order to enable a transaction having a

data field that includes a meta data field with data and a priority field with a requested

priority. One would be motivated to do so in order to integrate applications into a policy-

based networking system, and enable applications to participate in deciding how to apply a

particular QoS to a traffic flow generated by the application (Mohaban, col. 4, lines 52-56).

The combination of Bailey and Mohaban does not explicitly teach overriding the priority

based on the data in the meta data field with the requested priority included in the priority

field of the incoming transaction.

However, Haumont teaches override the priority based on the data in the meta data field with the requested priority included in the priority field of the incoming transaction (Haumont, col. 9, lines 26-29).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Bailey and Mohaban in view of Haumont in order to override the priority based on the data in the meta data field with the requested priority included in the priority field of the incoming transaction. One would be motivated to do so in order to enable a QoS scheme which provides support for Internet applications and their QoS requirements in communications systems having a packet data transmission capability (Haumont, col. 7, lines 8-11).

6.   With respect to claim 14, Bailey teaches the invention described in claim 13, including a network storage device, comprising: computer readable storage medium; and computer readable program code residing in said storage medium (Bailey, page 7, paragraph 70), including program code that is executed to: receiving an incoming transaction; define a usage policy that assigns a priority to the incoming transaction based on the data in the meta data field and that assigns priorities to outgoing transactions (Bailey, page 9, paragraph 82); and the network storage device wherein said program code is further executed to: read, by an agent in the network storage device, the data in the meta data field (Bailey, page 9, paragraph 82); and prioritize the incoming transaction based on a comparison of the data to the conditions in the table (Bailey, page 9, paragraph 82).

Bailey does not explicitly teach a transaction having a data field that includes a meta data field with data and a priority field with a requested priority.

However, Mohaban teaches a transaction having a data field that includes a meta data field with data (Mohaban, Fig. 1A, elements 102, 104, 106; col. 2, lines 51-65) and a priority field with a requested priority (Mohaban, Fig. 1A, element 108; col. 2, lines 51-65); and compare the data to conditions defined in a table having the usage policy (Mohaban, col. 11, line 34 – col. 12, line 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bailey in view of Mohaban in order to enable a transaction having a data field that includes a meta data field with data and a priority field with a requested priority. One would be motivated to do so in order to integrate applications into a policy-based networking system, and enable applications to participate in deciding how to apply a particular QoS to a traffic flow generated by the application (Mohaban, col. 4, lines 52-56).

7.   With respect to claim 15, Bailey teaches the invention described in claim 13, including the network storage device wherein said computer readable program code further comprises program code for identifying said network storage device (Bailey, page 8, paragraph 71), and wherein said network storage device is a NAS device (Bailey, page 3, paragraph 40).

8.   With respect to claim 16, Bailey teaches the invention described in claim 13, including a network storage device, comprising: computer readable storage medium; and computer readable program code residing in said storage medium (Bailey, page 7, paragraph 70),

including program code that is executed to: receiving an incoming transaction; define a usage policy that assigns a priority to the incoming transaction based on the data in the meta data field and that assigns priorities to outgoing transactions (Bailey, page 9, paragraph 82).

Bailey does not explicitly teach a transaction having a data field that includes a meta data field with data and a priority field with a requested priority.

However, Mohaban teaches a transaction having a data field that includes a meta data field with data (Mohaban, Fig. 1A, elements 102, 104, 106; col. 2, lines 51-65) and a priority field with a requested priority (Mohaban, Fig. 1A, element 108; col. 2, lines 51-65); and the network storage device wherein the priority based on the data in the meta data field is based on an application ID of an application originating the incoming transaction (Mohaban, col. 13, lines 17-32).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bailey in view of Mohaban in order to enable a transaction having a data field that includes a meta data field with data and a priority field with a requested priority. One would be motivated to do so in order to integrate applications into a policy-based networking system, and enable applications to participate in deciding how to apply a particular QoS to a traffic flow generated by the application (Mohaban, col. 4, lines 52-56).

9.   With respect to claim 19, Bailey teaches the invention described in claim 13, including the network storage device wherein an agent in the network storage device assigns a priority to the incoming transaction based on the data in the meta data field (Bailey, page 9, paragraph 82).

10.   With respect to claim 22, Bailey teaches a method for managing transactions at a network storage device, comprising: receiving, at the network storage device, an incoming transaction; assigning, by an agent at the network storage device, a priority to the incoming transaction based on the data in the meta data field satisfying a condition (Bailey, page 9, paragraph 82).

Bailey does not explicitly teach a transaction having a data field that includes a meta data field with data and a priority field with a requested priority.

However, Mohaban teaches a transaction having a data field that includes a meta data field with data (Mohaban, Fig. 1A, elements 102, 104, 106; col. 2, lines 51-65) and a priority field with a requested priority (Mohaban, Fig. 1A, element 108; col. 2, lines 51-65); and a usage policy (Mohaban, col. 11, line 34 – col. 12, line 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bailey in view of Mohaban in order to enable a transaction having a data field that includes a meta data field with data and a priority field with a requested priority. One would be motivated to do so in order to integrate applications into a policy-based networking system, and enable applications to participate in deciding how to apply a particular QoS to a traffic flow generated by the application (Mohaban, col. 4, lines 52-56).

The combination of Bailey and Mohaban does not explicitly teach overriding the priority based on the data in the meta data field with the requested priority included in the priority field of the incoming transaction.

However, Haumont teaches overriding, at the network storage device, the priority based on the data in the meta data field with the requested priority included in the priority field of the incoming transaction (Haumont, col. 9, lines 26-29).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Bailey and Mohaban in view of Haumont in order to override the priority based on the data in the meta data field with the requested priority included in the priority field of the incoming transaction. One would be motivated to do so in order to enable a QoS scheme which provides support for Internet applications and their QoS requirements in communications systems having a packet data transmission capability (Haumont, col. 7, lines 8-11).

11.   With respect to claim 23, Bailey teaches the invention described in claim 22, including a method for managing transactions at a network storage device, comprising: receiving, at the network storage device, an incoming transaction; assigning, by an agent at the network storage device, a priority to the incoming transaction based on the data in the meta data field satisfying a condition (Bailey, page 9, paragraph 82); the method further comprising: reading, by the agent, the data in the meta data field (Bailey, page 9, paragraph 82); and prioritizing the incoming transaction based on a comparison of the data to the conditions in the table (Bailey, page 9, paragraph 82).

Bailey does not explicitly teach a transaction having a data field that includes a meta data field with data and a priority field with a requested priority.

However, Mohaban teaches a transaction having a data field that includes a meta data field with data (Mohaban, Fig. 1A, elements 102, 104, 106; col. 2, lines 51-65) and a priority field with a requested priority (Mohaban, Fig. 1A, element 108; col. 2, lines 51-65); and comparing the data to conditions defined in a table having the usage policy (Mohaban, col. 11, line 34 – col. 12, line 4); and a usage policy (Mohaban, col. 11, line 34 – col. 12, line 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bailey in view of Mohaban in order to enable a transaction having a data field that includes a meta data field with data and a priority field with a requested priority. One would be motivated to do so in order to integrate applications into a policy-based networking system, and enable applications to participate in deciding how to apply a particular QoS to a traffic flow generated by the application (Mohaban, col. 4, lines 52-56).

12.   With respect to claim 24, Bailey teaches the invention described in claim 22, including a method for managing transactions at a network storage device, comprising: receiving, at the network storage device, an incoming transaction; assigning, by an agent at the network storage device, a priority to the incoming transaction based on the data in the meta data field satisfying a condition (Bailey, page 9, paragraph 82).

Bailey does not explicitly teach a transaction having a data field that includes a meta data field with data and a priority field with a requested priority.

However, Mohaban teaches a transaction having a data field that includes a meta data field with data (Mohaban, Fig. 1A, elements 102, 104, 106; col. 2, lines 51-65) and a priority field with a requested priority (Mohaban, Fig. 1A, element 108; col. 2, lines 51-65); a usage

policy (Mohaban, col. 11, line 34 – col. 12, line 4); and the method wherein said priority based on the data in the meta data field includes an application ID of an application originating the incoming transaction (Mohaban, col. 13, lines 17-32).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bailey in view of Mohaban in order to enable a transaction having a data field that includes a meta data field with data and a priority field with a requested priority. One would be motivated to do so in order to integrate applications into a policy-based networking system, and enable applications to participate in deciding how to apply a particular QoS to a traffic flow generated by the application (Mohaban, col. 4, lines 52-56).

(10) Response to Argument

The examiner summarizes the various points raised by the appellant and addresses them individually.

(A)   Appellant Argues: The examiner argues that because the physical machine (i.e., the network attached storage device) recited in claim 13 includes a computer readable medium, then the claim is directed to non-statutory subject matter. This argument is not correct since claim 13 is clearly directed to a machine or apparatus as stated in the preamble. The inclusion of a computer readable medium in such a machine or apparatus does not therefore make this machine or apparatus non-statutory as argued by the examiner.

In Response: The examiner respectfully submits that the rejection of claims 13-16 and 19 under 35 USC § 101 is proper. None of the limitations in claim 13 recite structural parts to support that the "network storage device" is directed to a physical machine. The "computer readable storage medium" limitation could not be considered a structural component based on the broadest reasonable interpretation of "computer readable medium," which encompasses non-statutory subject matter. The usage of the phrase "computer readable medium" is broad enough to include both "non-transitory" and "transitory" (moving electrons, etc) media. The specification does not clearly limit the utilization of a non-transitory computer readable medium and, thus does not constitute functional descriptive material ("An embodiment of the apparatus for managing a network storage device is preferably embodied in computer readable program code stored on computer readable storage medium. Preferably, the storage medium is contained within the network storage device" – see Specification, page 3, lines 12-15). Therefore, when the broadest reasonable interpretation of a claim covers a signal per se, the claim must be rejected under 35 U.S.C. § 101 as covering non-statutory subject matter. See In re Nuijten, 500 F.3d 1346, 1356-57 (Fed. Cir. 2007) (transitory embodiments are not directed to statutory subject matter).

The United States Patent and Trademark Office (USPTO) is obliged to give claims their broadest reasonable interpretation consistent with the specification during proceedings before the USPTO. See In re Zletz, 893 F.2d 319 (Fed. Cir. 1989) (during patent examination the pending claims must be interpreted as broadly as their terms reasonably allow). The broadest reasonable interpretation of a claim drawn to a computer readable medium (also called machine readable medium and other such variations) typically covers forms of **non-transitory tangible**

media and **transitory propagating signals per se** in view of the ordinary and customary meaning of computer readable media, particularly when the specification is silent. See MPEP 2111.01. When the broadest reasonable interpretation of a claim covers a signal per se, the claim must be rejected under 35 U.S.C. § 101 as covering non-statutory subject matter. See In re Nuijten, 500 F.3d 1346, 1356-57 (Fed. Cir. 2007) (transitory embodiments are not directed to statutory subject matter) and Interim Examination Instructions for Evaluating Subject Matter Eligibility Under 35 U.S.C. § 101, Aug. 24, 2009; p. 2.

The USPTO recognizes that applicants may have claims directed to computer readable media that cover signals per se, which the USPTO must reject under 35 U.S.C. § 101 as covering both non-statutory subject matter and statutory subject matter. In an effort to assist the patent community in overcoming a rejection or potential rejection under 35 U.S.C. § 101 in this situation, the USPTO suggests the following approach. A claim drawn to such a computer readable medium that covers both **transitory** and **non-transitory** embodiments may be amended to narrow the claim to cover only statutory embodiments to avoid a rejection under 35 U.S.C. § 101 by adding the limitation "**non-transitory**" to the claim. Cf. Animals - Patentability, 1077 Off. Gaz. Pat. Office 24 (April 21, 1987) (suggesting that applicants add the limitation "non-human" to a claim covering a multi-cellular organism to avoid a rejection under 35 U.S.C. § 101). Such an amendment would typically not raise the issue of new matter, even when the specification is silent because the broadest reasonable interpretation relies on the ordinary and customary meaning that includes signals per se. The limited situations in which such an amendment could raise issues of new matter occur, for example, when the specification does not support a non-transitory embodiment because a signal per se is the only viable embodiment

such that the amended claim is impermissibly broadened beyond the supporting disclosure. See, e.g., Gentry Gallery, Inc. v. Berkline Corp., 134 F.3d 1473 (Fed. Cir. 1998).

Therefore, claims 13-16 and 19 are non-statutory.

(B)   Appellant Argues: As one example, independent claim 13 recites a usage policy that assigns a priority to the incoming transaction based on the data in the meta data field and that assigns priorities to outgoing transactions. The claim then recites the priority based on the data in the meta data field is overridden with the requested priority included in the priority field of the incoming transaction. Bailey in view of Mohaban and Haumont does not teach or suggest these elements.

In Response: The examiner respectfully submits that the combination of Bailey, Mohaban, and Haumont teaches a usage policy that assigns a priority to the incoming transaction (QoS and other policy priorities may be applied to incoming traffic flow) based on the data in the meta data field (Quality of Service (QoS) parameters) and that assigns priorities to the outgoing transactions (QoS and other policy priorities may be applied to outgoing traffic flow – see Bailey, page 9, paragraph 82).

Additionally, the examiner respectfully submits that the combination of Bailey, Mohaban, and Haumont teaches override the priority based on the data in the meta data field with the requested priority included in the priority field of the incoming transaction (the precedence could be indicated per packet, whereby it is not part of the QoS profile, or it overrides that value of the

flow – see Haumont, col. 9, lines 26-29). The option for the precedence per packet overrides the

value of the QoS.

Thus, the combination of Bailey, Mohaban, and Haumont anticipates the claimed invention

by disclosing each and every limitation claimed.

(C)   **Appellant Argues:** Nowhere does Bailey teach or even suggest that this QoS parameter

would be "in the meta data field" as recited in claim 19.

In Response: The examiner respectfully submits that the combination of Bailey,

Mohaban, and Haumont teaches an agent in the network storage device assigns a priority to the

incoming transaction (QoS and other policy priorities may be applied to incoming traffic flow)

based on the data in the meta data field (the QoS parameter may indicate the priority of service

that a client on the external network is to receive – see Bailey, page 9, paragraph 82).

Thus, the combination of Bailey, Mohaban, and Haumont anticipates the claimed invention

by disclosing each and every limitation claimed.

(D)   **Appellant Argues:** Nowhere does this section of Mohaban teach or even suggest that the

meta data field includes an application ID of an application originating the incoming transaction.

In Response: The examiner respectfully submits that the combination of Bailey,

Mohaban, and Haumont teaches the method wherein said priority based on the data in the meta

data field (the QoS parameter may indicate the priority of service that a client on the external network is to receive. QoS and other policy priorities may be applied to incoming traffic flow – see Bailey, page 9, paragraph 82) includes an application ID of an application originating the incoming transaction (Pre-defined Policy Identifiers include application identifier – Mohaban, col. 13, lines 17-32).

Thus, the combination of Bailey, Mohaban, and Haumont anticipates the claimed invention by disclosing each and every limitation claimed.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Alicia Baturay/
Examiner, Art Unit 2441

20 April 2011

/Wing F. Chan/
Supervisory Patent Examiner, Art Unit 2441
Conferees:

/Quang N. Nguyen/
Primary Examiner, Art Unit 2441

/Wing F. Chan/
Supervisory Patent Examiner, Art Unit 2441